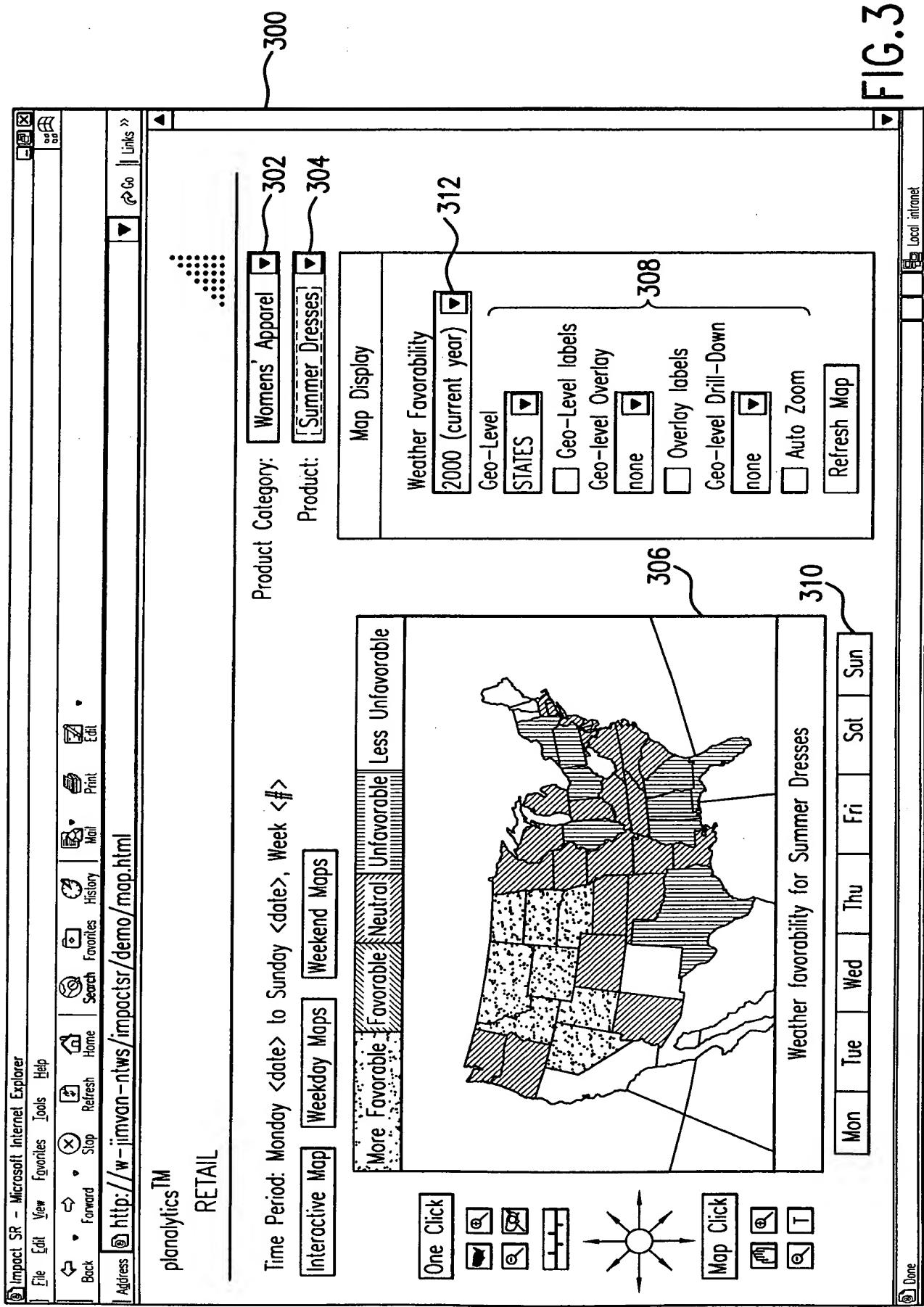
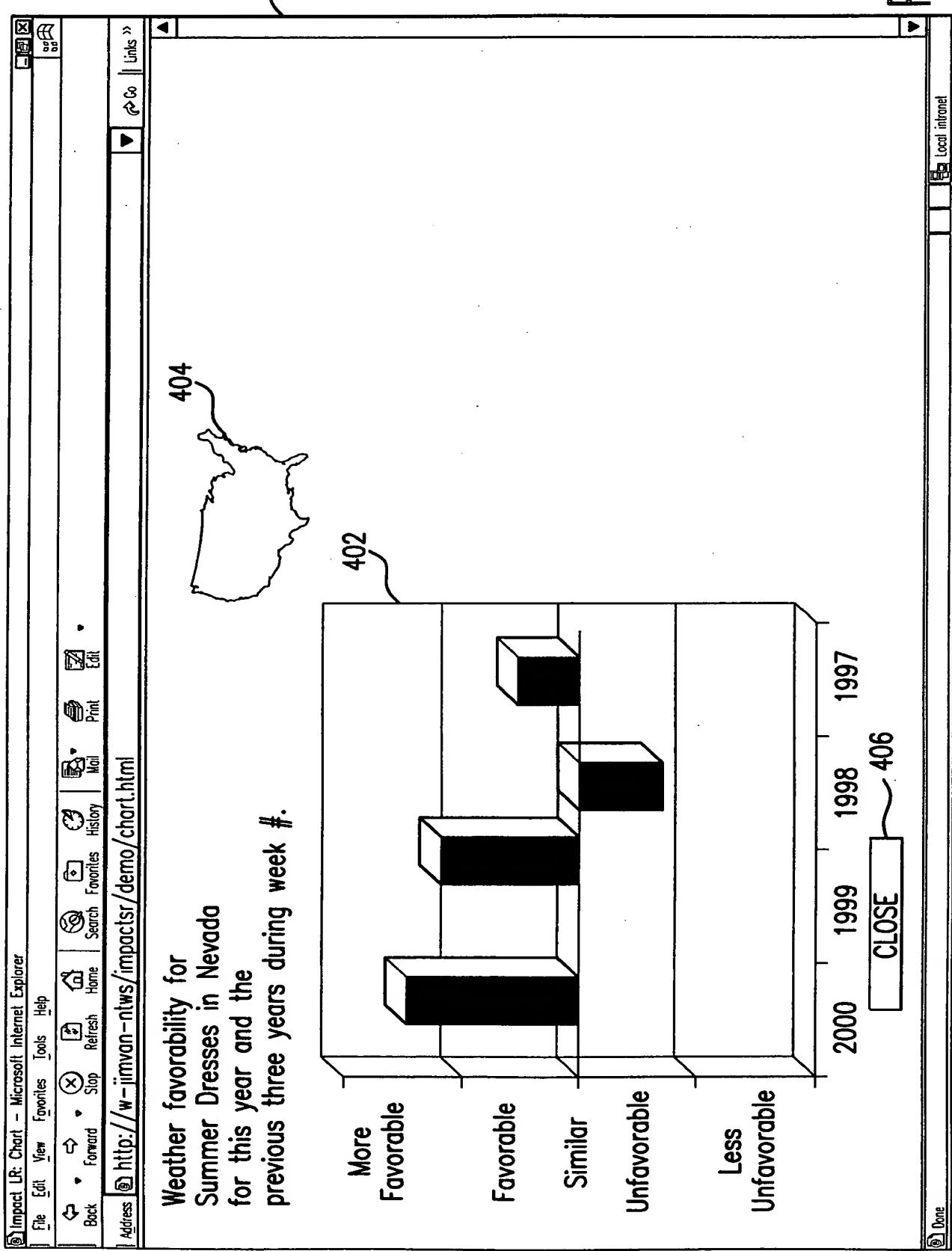
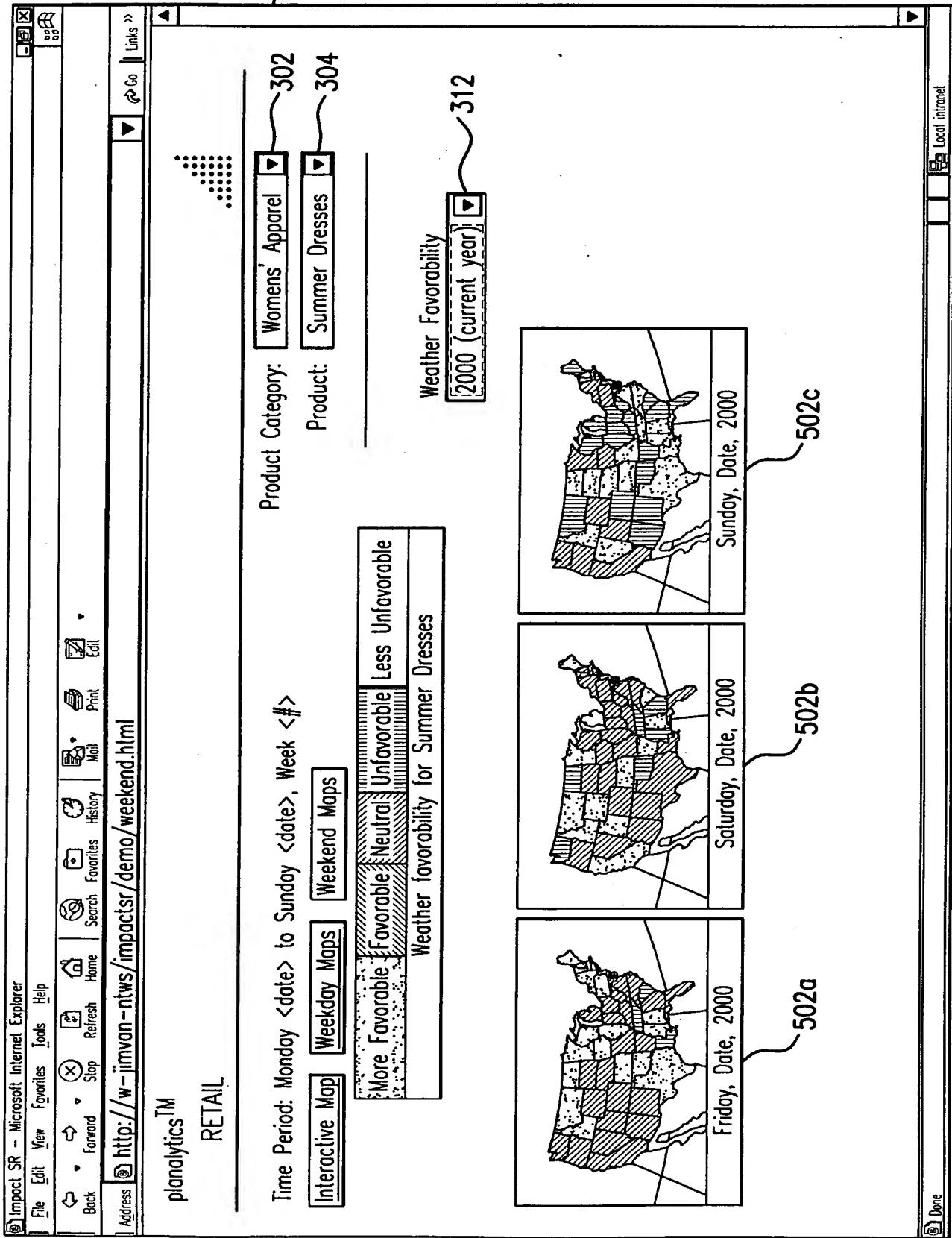
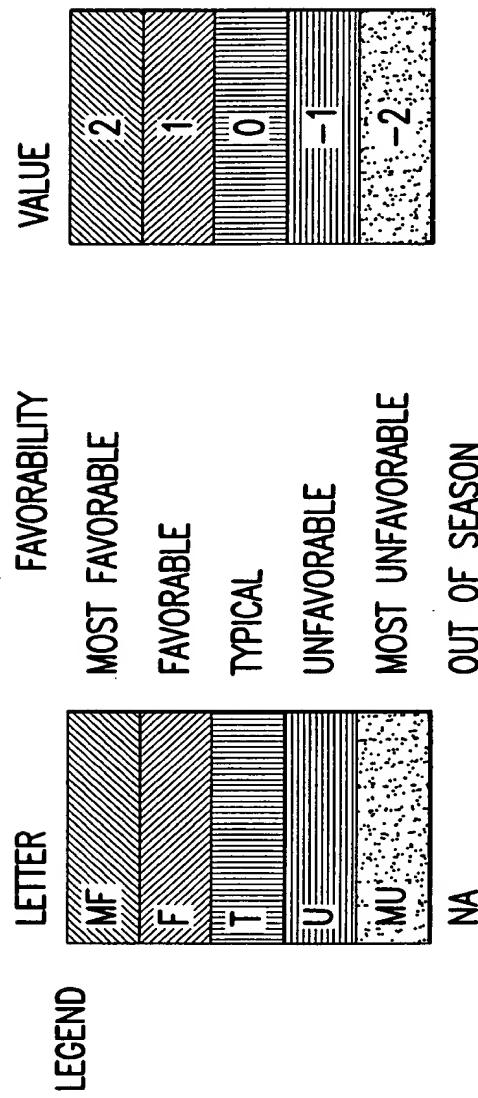


FIG.2









		DRY	SHOWERS	RAIN	SNOW
1	A/C	2	2	1	-2
2	FANS	2	2	1	-2
22	AUTO A/C UNITS	2	1	1	-2
26	BOTTLED WATER	0	0	-1	-2

FIG. 6A

HEATERS		B	DRY	SHOWERS	RAIN	SNOW
FILTERS		V. WARM	-2	-2	-1	0
		WARM	-1	-1	-1	0
		SEASONAL	0	0	1	1
		COLD	1	2	2	2
		V. COLD	2	2	2	2

3

HUMIDIFIERS		C	DRY	SHOWERS	RAIN	SNOW
		V. WARM	-2	-2	-2	0
		WARM	-1	-1	-1	0
		SEASONAL	0	0	0	0
		COLD	2	2	1	1
		V. COLD	2	2	1	1

4

FIG. 6B

5 BEDDING PLATNS
6 TREES & SHRUBS
WARM IS GOOD

D	DRY	SHOWERS	RAIN	SNOW
V. WARM	2	1	-1	-2
WARM	2	1	-1	-2
SEASONAL	1	0	-1	-2
COLD	-1	-1	-2	-2
V. COLD	-1	-1	-2	-2

5 BEDDING PLATNS
6 TREES & SHRUBS
SEASONAL IS GOOD

E	DRY	SHOWERS	RAIN	SNOW
V. WARM	-1	-1	-2	-2
WARM	0	0	-2	-2
SEASONAL	2	2	-1	-2
COLD	1	1	-1	-2
V. COLD	-1	-1	-2	-2

FIG. 6C

5 BEDDING PLATNS
6 TREES & SHRUBS
COLD IS GOOD

	F	DRY	SHOWERS	RAIN	SNOW
V. WARM	-2	-2	-2	-2	-2
WARM	-1	-1	-2	-2	-2
SEASONAL	1	1	-1	-2	-2
COLD	2	2	-1	-2	-2
V. COLD	1	1	-1	-2	-2

7 GED SOIL/PEAT/MULCH
WARM/DRY GOOD

	G	DRY	SHOWERS	RAIN	SNOW
V. WARM	2	1	-1	-2	-2
WARM	2	1	-1	-2	-2
SEASONAL	1	0	-1	-2	-2
COLD	-1	-1	-2	-2	-2
V. COLD	-1	-1	-2	-2	-2

FIG.6D

7 GED SOIL/PEAT/MULCH
SEASONAL/DRY GOOD

H	DRY	SHOWERS	RAIN	SNOW
V. WARM	-1	-1	-2	-2
WARM	0	0	-2	-2
SEASONAL	2	1	-1	-2
COLD	1	1	-1	-2
V. COLD	-1	-1	-2	-2

7 GED SOIL/PEAT/MULCH
COLD/DRY GOOD

I	DRY	SHOWERS	RAIN	SNOW
V. WARM	-2	-2	-2	-2
WARM	0	-1	-2	-2
SEASONAL	1	1	-1	-2
COLD	2	2	-1	-2
V. COLD	1	1	-1	-2

FIG. 6E

FERTILIZER
WARM/DRY GOOD

	J	DRY	SHOWERS	RAIN	SNOW
V. WARM	2	1	-1	-2	
WARM	2	1	-1	-2	
SEASONAL	1	0	-1	-2	
COLD	0	-1	-2	-2	
V. COLD	-1	-1	-2	-2	

FERTIZERS
SEAS.T/SEAS.P. GOOD

	K	DRY	SHOWERS	RAIN	SNOW
V. WARM	-1	-1	-1	-2	
WARM	0	1	-1	-2	
SEASONAL	2	2	-1	-2	
COLD	1	1	-1	-2	
V. COLD	-1	0	-1	-2	

FIG. 6F

8 FERTILIZERS
COLD/SEAS.P GOOD

L	DRY	SHOWERS	RAIN	SNOW
V. WARM	-2	-1	-1	-2
WARM	-1	0	-1	-2
SEASONAL	0	1	-1	-2
COLD	1	2	-1	-2
V. COLD	1	1	-1	-2

9 WEED KILLER
INSECTICIDES
WARM GOOD

10

M	DRY	SHOWERS	RAIN	SNOW
V. WARM	2	1	-1	-2
WARM	2	1	-1	-2
SEASONAL	0	0	-1	-2
COLD	0	-1	-2	-2
V. COLD	-1	-2	-2	-2

FIG.6G

9 WEED KILLER
10 INSECTICIDES
11 SPRINKLERS/HOSES

	N	DRY	SHOWERS	RAIN	SNOW
V. WARM	0	0	-2	-2	-2
WARM	0	1	-2	-2	-2
SEASONAL	2	2	-1	-2	-2
COLD	1	1	-2	-2	-2
V. COLD	-1	-1	-2	-2	-2

	0	DRY	SHOWERS	RAIN	SNOW
V. WARM	2	1	-1	-1	-2
WARM	2	1	-1	-1	-2
SEASONAL	1	0	-1	-1	-2
COLD	1	-1	-2	-2	-2
V. COLD	0	-1	-2	-2	-2

FIG. 6H

12 MOWERS/TRIMMERS
WARM/SEAS P. GOOD

P	DRY	SHOWERS	RAIN	SNOW
V. WARM	1	2	-1	-2
WARM	-1	2	-1	-2
SEASONAL	1	1	-1	-2
COLD	0	-1	-2	-2
V. COLD	-1	-1	-2	-2

12 MOWERS/TRIMMERS
SEAS T./SEAS P. GOOD

Q	DRY	SHOWERS	RAIN	SNOW
V. WARM	-2	0	-1	-2
WARM	-1	1	-1	-2
SEASONAL	0	2	-1	-2
COLD	1	1	-1	-2
V. COLD	-1	0	-1	-2

FIG. 6I

12 MOWERS/TRIMMERS
COLD T/SEAS P GOOD

R	DRY	SHOWERS	RAIN	SNOW
V. WARM	-2	-1	-1	-2
WARM	-1	0	-1	-2
SEASONAL	0	1	-1	-2
COLD	1	2	-1	-2
V. COLD	1	2	-1	-2

13 GARDEN TOOLS
15 GRILLS/CHARCOAL
16 O/FURN. LAWN CHAIRS
20 WAX/WASH CHEMICALS
31 HOUSE/DECK PAINT
WARM GOOD

S	DRY	SHOWERS	RAIN	SNOW
V. WARM	2	1	-1	-2
WARM	2	1	-1	-2
SEASONAL	1	0	-1	-2
COLD	-1	-1	-2	-2
V. COLD	-1	-1	-2	-2

FIG. 6J

13	GARDEN TOOLS	T	DRY	SHOWERS	RAIN	SNOW
15	GRILLS/CHARCOAL	V. WARM	-1	-1	-2	-2
16	O/FURN. LAWN CHAIRS	WARM	0	0	-2	-2
20	WAX/WASH CHEMICALS	SEASONAL	2	2	-1	-2
31	HOUSE/DECK PAINT	COLD	1	1	-1	-2
	SEASONAL IS GOOD	V. COLD	-1	-1	-2	-2

13	GARDEN TOOLS	U	DRY	SHOWERS	RAIN	SNOW
15	GRILLS/CHARCOAL	V. WARM	-2	-2	-2	-2
16	O/FURN. LAWN CHAIRS	WARM	-1	-1	-2	-2
20	WAX/WASH CHEMICALS	SEASONAL	1	1	-1	-2
31	HOUSE/DECK PAINT	COLD	2	2	-1	-2
	COLD IS GOOD	V. COLD	1	1	-1	-2

FIG. 6K

14 POOL SUPPLIES
24 WATER TOYS
25 KID POOLS/POOL TOYS
28 SUNTAN LOTION
29 BEACH SUPPLIES

	V	DRY	SHOWERS	RAIN	SNOW
W. WARM	2	1	0	-2	
WARM	2	1	-1	-2	
SEASONAL	0	0	-1	-2	
COLD	-1	-1	-2	-2	
V. COLD	-1	-1	-2	-2	

17 NOW TOOLS/BLOWERS
SNOW/ICE/FROST GOOD

	W	DRY	SNOW SHWR.	ICE	SNOW
V. WARM	-2	-2	0	1	
WARM	-2	-1	1	1	
SEASONAL	-1	1	1	2	
COLD	0	2	2	2	
V. COLD	1	2	2	2	

NOTE: WINTER
PRECIP
LEGEND

FIG. 6L

FIRELOGS
COLD / WET GOOD

X	DRY	R/S SHWRS.	RAIN/ICE	SNOW
V. WARM	-2	-2	-1	0
WARM	-1	-1	0	1
SEASONAL	0	0	1	1
COLD	1	1	2	2
V. COLD	2	2	2	2

18

19	BATTERIES
21	ANTIFREEZE
	COLD IS GOOD

Y	DRY	SHOWERS	RAIN	SNOW
V. WARM	-2	-2	-2	0
WARM	-1	-1	-1	0
SEASONAL	0	0	0	1
COLD	1	2	2	2
V. COLD	2	2	2	2

9

FIG. 6M

19	BATTERIES
21	ANTIFREEZE
	<u>WARM IS GOOD</u>

Z	DRY	SHOWERS	RAIN	SNOW
V. WARM	1	2	2	NA
WARM	1	1	1	NA
SEASONAL	0	0	0	NA
COLD	-1	-1	-1	-1
V. COLD	-2	-2	-2	-2

23 WIPERS/WASHER FLUID
30 UMBRELLAS

AA	DRY	SHOWERS	RAIN	SNOW
V. WARM	-2	1	2	2
WARM	-2	1	2	2
SEASONAL	-2	1	2	2
COLD	-2	1	2	2
V. COLD	-2	1	2	2

FIG. 6N

27 HAND LOTION

BB	DRY	SHOWERS	RAIN	SNOW
V. WARM	0	-2	-2	0
WARM	0	-1	-1	0
SEASONAL	1	0	0	1
COLD	2	2	0	1
V. COLD	2	2	2	2

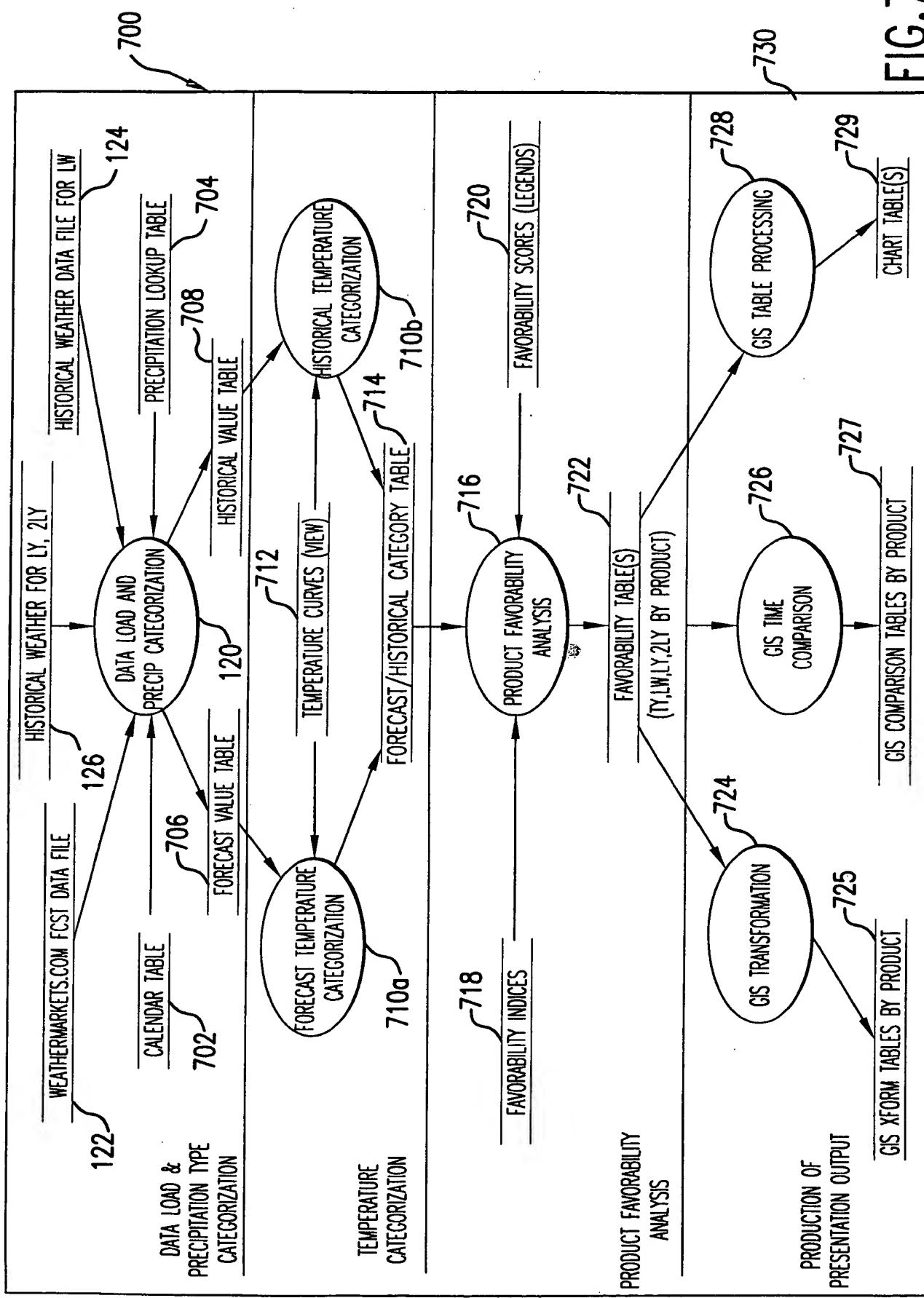
COLD/DRY GOOD

27 HAND LOTION

CC	DRY	SHOWERS	RAIN	SNOW
V. WARM	2	1	0	NA
WARM	1	0	-1	NA
SEASONAL	1	-1	-1	NA
COLD	1	0	-1	NA
V. COLD	2	1	0	NA

WARM/DRY GOOD

FIG.60



WEATHER HISTORY 126

YEAR	MA	DATA TYPE	P1	P2	P3	P4	P5	P6
1994	MSA 100	TEMP.SEA	46	47	50	51	54	55
1995	MSA 100	TEMP.SEA	46	47	49	51	53	55
1994	MSA 100	SNOW.SEA	0.7	0.2	0.2	0.1	0	0.1
1995	MSA 100	SNOW.SEA	0.8	0.2	0.2	0.1	0	0
1994	MSA 100	PREC.SEA	1.01	1.03	1.08	1.1	1.12	1.1
1995	MSA 100	PREC.SEA	1.01	1.03	1.07	1.1	1.12	1.1
1994	MSA 100	SNOW	0	0	0	0	1.2	0
1995	MSA 100	SNOW	0	0	0	0	0	0
1994	MSA 100	PREC	1.5	0.4	0.9	1.3	1.7	0.3
1995	MSA 100	PREC	1.1	0.01	2.68	1.78	0.48	0.01
1994	MSA 100	TEMP	49	43	45	47	50	42
1995	MSA 100	TEMP	53	51	56	50	58	54
1994	MSA 100	TEMP.CAT	1	-1	-1	-1	-1	-1
1995	MSA 100	TEMP.CAT	1	1	1	0	1	-1
1994	MSA 100	PREC.CAT	1	-1	-1	1	1	-1
1995	MSA 100	PREC.CAT	1	-1	1	1	1	-1

802
803
804
805

FIG.8

:

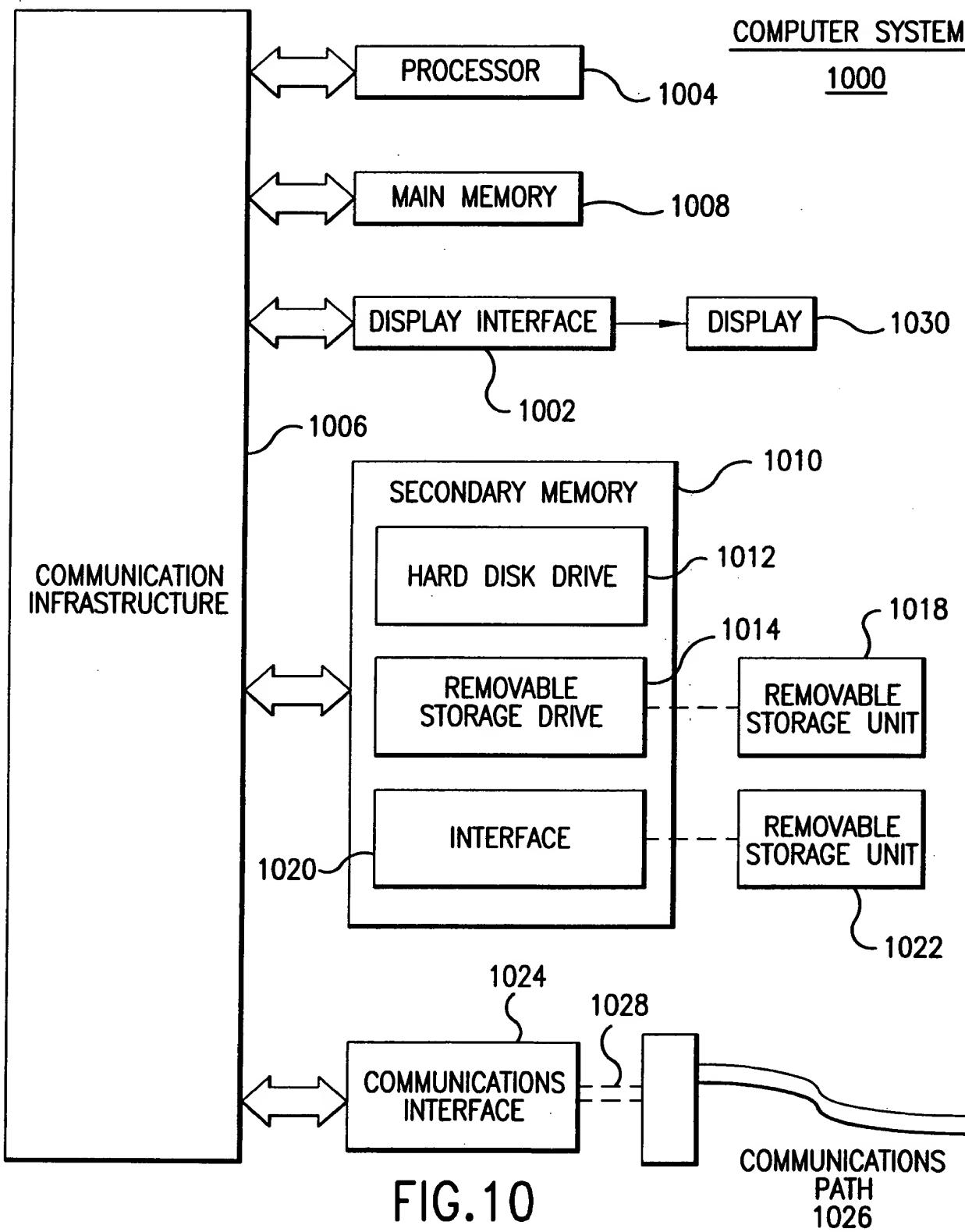
WEATHER FORECAST DATA 900

YEAR	MA	DATA TYPE	P1	P2	P3	P4	P5	P6
N+1	MSA 100	SNOW	0.9	0.4	0.3	0.2	0	0
N+1	MSA 100	PREC	1.1	1.05	1.05	1.00	1.15	1.2
N+1	MSA 100	TEMP	48	49	50	53	55	57
N+1	MSA 100	TEMP.CAT	1	1	1	1	1	-1
N+1	MSA 100	PREC.CAT	1	1	-1	-1	1	1
N+1	MSA 100	SNOW.CAT	1	0	0	1	0	0
N+1	MSA 100	SNOW.SEA	0.8	0.4	0.3	0.1	0	0
N+1	MSA 100	PREC.SEA	1.00	1.03	1.06	1.05	1.10	1.1
N+1	MSA 100	TEMP.SEA	47	47	49	52	54	55

902
904

FIG.9

⋮



CALENDAR TABLE 102

NAME	NULL?	TYPE	DATE	NUMBER (38)	NUMBER (38)	NUMBER (38)	VARCHAR2 (9)	NUMBER (38)	VARCHAR2 (9)	VARCHAR2 (9)	VARCHAR2 (3)	VARCHAR2 (16)	VARCHAR2 (3)	DATE_ID	YEAR_ID	QUARTER	MONTHNUM	MONTHNAME	WEEKNUM	DAYNAME	WEEKEND	HOLIDAYDESC	HOLIDAYFLAG	
	NOT NULL																							
YEAR_ID		NUMBER (38)																						
QUARTER		NUMBER (38)																						
MONTHNUM		NUMBER (38)																						
MONTHNAME		VARCHAR2 (9)																						
WEEKNUM		NUMBER (38)																						
DAYNAME		VARCHAR2 (9)																						
WEEKEND		VARCHAR2 (3)																						
HOLIDAYDESC		VARCHAR2 (16)																						
HOLIDAYFLAG		VARCHAR2 (3)																						
3-FEB-97	1997	1		1	1	1	FEBRUARY	1	1	1	1	1	1	MONDAY	1	1	1	1	1	1	1	1	1	1
4-FEB-97	1997	1		1	1	1	FEBRUARY	1	2	2	2	2	2	TUESDAY	1	2	2	2	2	2	2	2	2	2
5-FEB-97	1997	1		1	1	1	FEBRUARY	1	3	3	3	3	3	WEDNESDAY	1	3	3	3	3	3	3	3	3	3
6-FEB-97	1997	1		1	1	1	FEBRUARY	1	4	4	4	4	4	THURSDAY	1	4	4	4	4	4	4	4	4	4
7-FEB-97	1997	1		1	1	1	FEBRUARY	1	5	5	5	5	5	FRIDAY	1	5	5	5	5	5	5	5	5	5
8-FEB-97	1997	1		1	1	1	FEBRUARY	1	6	6	6	6	6	SATURDAY	1	6	6	6	6	6	6	6	6	6
9-FEB-97	1997	1		1	1	1	FEBRUARY	1	7	7	7	7	7	SUNDAY	1	7	7	7	7	7	7	7	7	7
10-FEB-97	1997	1		1	1	1	FEBRUARY	2	1	1	1	1	1	MONDAY	1	1	1	1	1	1	1	1	1	1
11-FEB-97	1997	1		1	1	1	FEBRUARY	2	2	2	2	2	2	TUESDAY	1	2	2	2	2	2	2	2	2	2
12-FEB-97	1997	1		1	1	1	FEBRUARY	2	3	3	3	3	3	WEDNESDAY	1	3	3	3	3	3	3	3	3	3
13-FEB-97	1997	1		1	1	1	FEBRUARY	2	4	4	4	4	4	THURSDAY	1	4	4	4	4	4	4	4	4	4
14-FEB-97	1997	1		1	1	1	FEBRUARY	2	5	5	5	5	5	FRIDAY	1	5	5	5	5	5	5	5	5	5
15-FEB-97	1997	1		1	1	1	FEBRUARY	2	6	6	6	6	6	SATURDAY	1	6	6	6	6	6	6	6	6	6
16-FEB-97	1997	1		1	1	1	FEBRUARY	2	7	7	7	7	7	SUNDAY	1	7	7	7	7	7	7	7	7	7
17-FEB-97	1997	1		1	1	1	FEBRUARY	3	1	1	1	1	1	MONDAY	1	1	1	1	1	1	1	1	1	1
18-FEB-97	1997	1		1	1	1	FEBRUARY	3	2	2	2	2	2	TUESDAY	1	2	2	2	2	2	2	2	2	2
19-FEB-97	1997	1		1	1	1	FEBRUARY	3	3	3	3	3	3	WEDNESDAY	1	3	3	3	3	3	3	3	3	3
20-FEB-97	1997	1		1	1	1	FEBRUARY	3	4	4	4	4	4	THURSDAY	1	4	4	4	4	4	4	4	4	4
21-FEB-97	1997	1		1	1	1	FEBRUARY	3	5	5	5	5	5	FRIDAY	1	5	5	5	5	5	5	5	5	5
22-FEB-97	1997	1		1	1	1	FEBRUARY	3	6	6	6	6	6	SATURDAY	1	6	6	6	6	6	6	6	6	6
23-FEB-97	1997	1		1	1	1	FEBRUARY	3	7	7	7	7	7	SUNDAY	1	7	7	7	7	7	7	7	7	7

FIG. 11A

PRECIPITATION LOOKUP TABLE 704

PRECIP_TYPE	PRECIP_CODE	PRECEDENCE	PRECIP_DEFINITION
SN		6	SNOW
ICE		5	ICE
SNSH		4	SNOW SHOWERS
RA		3	RAIN
RASH		2	SHOWERS
DRY		1	DRY

EVENT_PRECIP_CODE	EVENT_CODE	EVENT_DEFINITION	PRECIP_CODE
MISS		MISSING EVENT STRING	DRY
UP		UNKNOWN PRECIPITATION	DRY
UNINT		UNINTERPRETABLE CODE	DRY
TS		THUNDERSTORM	DRY
RW		RAINSHOWERS (OBSOLETE CODE)	RASH
RN		RAIN (OBSOLETE CODE)	RA
IP		ICE PELLETS (OBSOLETE CODE)	ICE
PE		ICE PELLETS	ICE
DZ		DRIZZLE	RA
RA		RAIN	RA
SH		SHOWERS	RASH
SN		SNOW	SN
SG		SNOW GRAINS (SMALL GRANULAR SNOW)	SN
IC		ICE CRYSTALS	DRY
PL		ICE PELLETS	ICE
GR		HAIL	RASH
GS		SMALL HAIL OR SNOW PELLETS	RASH
BR		MIST (LIGHT FOG)	RASH
FG		FOG	DRY

FIG. 11B

HISTORICAL VALUE TABLE 706 AND FORECAST VALUE TABLE 708

NAME	NULL?	TYPE
STATION	NOT NULL	CHAR (4)
DAY	NOT NULL	DATE
MAX_TEMP	NUMBER (3)	
MIN_TEMP	NUMBER (3)	
MEAN_TEMP	NUMBER (3)	
PRECIP	NUMBER (6,2)	
PRECIP_CAT	VARCHAR2 (9)	
TYPE	VARCHAR2 (4)	

FIG. 11C

HISTORICAL CATEGORY TABLE AND FORECAST CATEGORY TABLE 714

NAME	NULL?	TYPE
STATION	NOT NULL	CHAR (4)
DAY	NOT NULL	DATE
MAX_TEMP	NUMBER (3)	
MIN_TEMP	NUMBER (3)	
MEAN_TEMP	NUMBER (3)	
TEMP_CAT	NUMBER (3)	
PRECIP	NUMBER (6,2)	
PRECIP_CAT	VARCHAR2 (9)	
TYPE	VARCHAR2 (4)	

FIG. 11D

PRODUCT FAVORABILITY TABLE 722

NAME	NULL?	TYPE
STATION	NOT NULL	CHAR (4)
DAY	NOT NULL	DATE
PRODUCT_ID	NOT NULL	NUMBER (10)
WX_FAV		NUMBER (1,2)

FIG. 11E

GIS TRANSFORM 725 AND GIS COMPARISON TABLE 727

NAME	NULL?	TYPE
STATION		NUMBER (1,2)
D1		NUMBER (1,2)
D2		NUMBER (1,2)
D3		NUMBER (1,2)
D4		NUMBER (1,2)
D5		NUMBER (1,2)
D6		NUMBER (1,2)
D7		NUMBER (1,2)

FIG. 11F

PRE-GIS TRANSFORMATION

STATION	DAY	PRODUCT_ID	WX_FAV
KPHL	9/4/00	1	1
KPHL	9/5/00	1	2
KPHL	9/6/00	1	-1
KBWI	9/4/00	1	2
KBWI	9/5/00	1	0
KBWI	9/6/00	1	0
KBOS	9/4/00	1	1
KBOS	9/5/00	1	2
KBOS	9/6/00	1	-2

FIG. 11G

POST-GIS TRANSFORMATION

STATION	D1	D2	D3
KPHL	1	2	-1
KBWI	2	0	0
KBOS	1	2	-2

FIG. 11H